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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 09/900,838 | 07/06/2001 | Yunzhang Wang | 2183A | 5208 |
| 7590 | 05/18/2004 | | EXAMINER | |
| Milliken & Company P.O. Box 1927 Spartanburg, SC 29304 | | | ILAN, RUTH | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3616 | |

DATE MAILED: 05/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/900,838

Applicant(s)

WANG ET AL.

Examiner

Ruth Ilan

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 November 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15,16,20 and 131-152 is/are pending in the application.
- 4a) Of the above claim(s) 135,139,142-144 and 150-152 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 15,16,20,131-134,136-138,140,141 and 145-149 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Misnumbered claims beginning with the second instance of 147, 148, 149, 149 (note there were two instances of 149) and 150 have been renumbered 148-152.)

2. Claim 141 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 141, as currently presented, depends from claim 144, which is not a previous claim. For the purposes of examination, it will be assumed that claim 141 was intended to depend from claim 140.

Election/Restrictions

3. The amendment of November 6, 2003 includes new claims 131-152. Many of these new claims are drawn to non-elected species. In particular, as best understood, claim 135 appears to be directed to the embodiment of Figure 10 (see page 20, last paragraph) and also possibly Figures 17 and 18. Regarding claim 139, the circular

stitching is disclosed in Figure 10. Regarding claim 142, such tethers are shown in Figure 7, which includes holes in the tether. This limitation of holes in the tether is not included in the elected species. These claim limitations were also only previously presented in claims depending from claim 21, to the embodiment of Figure 10, that were previously withdrawn. Regarding claims 143 and 144, the tethers formed of two parts are disclosed in relation to Figure 17-23B, 41 and drawn to species II, which is not elected. Regarding claims 150-152 (previously misnumbered claims 149, 149, and 150) these limitation are only shown in relation to Figure 10, and as such are not elected.

4. In summary, claims 135, 139, 142-144 and 150-152 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 7.

Drawings

5. The drawings were received on November 13, 2003. These drawings are approved. In the future, please include the text "Replacement Sheet" on any new drawings. In the instant application, the Examiner has provided this text. See below:

INFORMATION ON HOW TO EFFECT DRAWING CHANGES

Replacement Drawing Sheets

Drawing changes must be made by presenting replacement figures which incorporate the desired changes and which comply with 37 CFR 1.84. An explanation of the changes made must be presented either in the drawing amendments, or remarks, section of the amendment. Any replacement drawing sheet must be identified in the top

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margin as "Replacement Sheet" and include all of the figures appearing on the immediate prior version of the sheet, even though only one figure may be amended. The figure or figure number of the amended drawing(s) must not be labeled as "amended." If the changes to the drawing figure(s) are not accepted by the examiner, applicant will be notified of any required corrective action in the next Office action. No further drawing submission will be required, unless applicant is notified.

Identifying indicia, if provided, should include the title of the invention, inventor's name, and application number, or docket number (if any) if an application number has not been assigned to the application. If this information is provided, it must be placed on the front of each sheet and centered within the top margin.

Annotated Drawing Sheets

A marked-up copy of any amended drawing figure, including annotations indicating the changes made, may be submitted or required by the examiner. The annotated drawing sheets must be clearly labeled as "Annotated Marked-up Drawings" and accompany the replacement sheets.

Timing of Corrections

Applicant is required to submit acceptable corrected drawings within the time period set in the Office action. See 37 CFR 1.85(a). Failure to take corrective action within the set period will result in ABANDONMENT of the application.

If corrected drawings are required in a Notice of Allowability (PTOL-37), the new drawings **MUST** be filed within the **THREE MONTH** shortened statutory period set for reply in the "Notice of Allowability." Extensions of time may **NOT** be obtained under the provisions of 37 CFR 1.136 for filing the corrected drawings after the mailing of a Notice of Allowability.

Specification

6. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: The language of claims 146-148 is not found in the specification.

Claim Rejections - 35 USC § 112

7. Claims 147 and 148 (old second instance of 147) are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. There is no disclosure of a fill volume ratio of at most 2/3 or at most 1/3. The only location in the specification where a fill volume ratio is disclosed is on page 23, which describes a ratio of 12/38.

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claim 137 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 137 recites "a concave area" in line 2. Since a concave area has already been recited in claim 132, this double inclusion is unclear. The Examiner suggests changing "a concave area" to "the concave area".

Claim Rejections - 35 USC § 103

10. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

11. Claims 15, 16, 20, 131, 132, 133, 134, 136-138, 140, 141, 145-149 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakai et al. (JP 409188218) in view

of Conlee et al. (WO 00/12359.) Sakai et al. (Figure 8, 15, or 11) teaches an air bag with first and second panels (111,112) and an additional chamber formed by a third panel (12) attached to a central portion of the second panel and at least one vent hole (5) in the second panel to provide gas to the second chamber (see Figure 8.) The vent hole is located under the third panel. Regarding claim 15, the embodiment in Figure 15 teaches the tethers (71) and concave second panel. The second panel is smaller than the first panel, and there are two vent holes (5) located adjacent to the tether. It appears that based on the amendment as filed, the Applicant intends a second concave area on the panel, not an entirely concave panel. Sakai et al. fails to disclose a concave area in the center of the panel. Conlee et al. (Figure 1b) teaches that it is known to size tethers so that the center of the central panel is concave (see page 8, last paragraph) and that such a shape is desirable because it lessens the rearward motion of the driver and allows for quick inflation (see paragraph 2, page 8.) It would have been obvious to one having ordinary skill in the art at the time of the invention to size the tethers of Sakai et al. in the manner disclosed by Conlee et al., since Sakai et al. provides a somewhat schematic representation, and Conlee et al. teaches that such tethering is beneficial for safe deployment. Regarding claims 20 and 149, the fabric is either coated or uncoated. Regarding claim 146, since the vent hole his clearly smaller than the aperture for the inflator, the secondary chamber fills slower. Regarding claims 140 and 141, Sakai et al. (Figure 14) teaches that it is known to provide additional chambers through the use of additional panels (13) with vents (5) It would have been obvious to one having ordinary skill in the art at the time of the invention to include a fourth panel to the embodiment of

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Sakai disclosed in Figure 15 in view of Conlee et al., based on the embodiment of Figure 14, in order to provide for additional padding and controlled inflation. Regarding the size of the fourth panel, it would be well within the level of ordinary skill in the art to provide a larger fourth panel, since it has been held that a change in size involves only routine skill in the art. *In re Rose*, 105 USPQ 137. Regarding claims 147 and 148, Sakai et al. does not provide specific dimensions of the chambers, although does clearly show that the second chamber is smaller than the first chamber. It would have been obvious to one having ordinary skill in the art at the time of the invention to make the air bag chambers any size as an obvious matter of design choice, since the applicant has not disclosed any of these sizes as having a particular purpose.

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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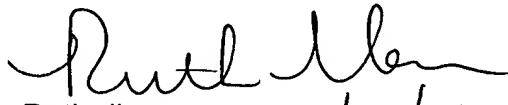
the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ruth Ilan whose telephone number is 703-306-5956.

The examiner can normally be reached on Monday-Friday, 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on 703-308-2089. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Ruth Ilan
Examiner
Art Unit 3616
5/17/04

RI
May 17, 2004